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EXAMINER

COMBS, JANELL A

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 08/29/2002

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/508,490

Applicant(s)

BODE ET AL.

Examiner

Janelle Combs-Morillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Appeal Brief

1. In view of the appeal brief filed on June 4, 2002, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Process claims 1-5 must have actively recited steps.

Additionally, the examiner is unsure of the definition of "ageing sensitive" steel, as used by the instant invention. Applicant explains in the present specification page 1 that ageing

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sensitive steel include unkilld steels, which agrees with the teachings of "ASM Handbook: Vol.1 Properties and Selection: Irons, Steels, and High-Performance Alloys" pp 141-146, 204-208, 212-215, 573-575, 578-580 and "The Making, Shaping and Treating of Steel" pp 410-413, 1118-1119, 1135-1138, 1283-1287, 1398-1404. However, the example (specification page 4) of the instant invention appears to be an aluminum killed steel, which one of skill in the art would expect to be non-ageing. Please clarify.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaoka et al (US 4,323,403) alone or in view of "ASM Handbook: Vol.1 Properties and Selection: Irons, Steels, and High-Performance Alloys" pp 141-146, 204-208, 212-215, 573-575, 578-580 or "The Making, Shaping and Treating of Steel" pp 410-413, 1118-1119, 1135-1138, 1283-1287, 1398-1404.

Nakaoka (US 4,323,403) teaches a process for the production of steel sheets with good press formability (column 1 lines 15-19) comprising the steps of: providing an ageing sensitive steel (column 3 line 29), subjecting said steel to temper rolling (column 5 lines 45-46) in order to achieve a yield point elongation=0 (column 5 line 49, column 6 lines 35-36), aging so that the yield point elongation <1.2% (column 6 lines 46-47), wherein said steel sheet is usable for

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drawing purposes such as press forming (column 1 lines 15, 35). The examiner points out that press forming qualifies as “cold working to give a structural component”, as presently claimed. Nakaoka does not mention a) the strip is stored below room temperature or b) the strip is “stove-finished”.

Concerning item a), the examiner points out that aging is well known to be a diffusion controlled process (dependent on temperature). This is further supported by Nakaoka who teaches that natural aging of 2 months at room temperature (25°C) is equivalent to aging 8 days at 38°C (column 3 lines 42-45). This is further supported by “The Making, Shaping and Treating of Steel” which teaches that aging 1 year at 0°C is equivalent to 6 months at room temperature (page 1286 Table 42, etc.), wherein the diffusion of C into austenitic Fe is represented by the following equation-

$$D = D_0 e^{-\frac{R}{RT}} \text{ (page 410, 411).}$$

It would have been obvious to one of ordinary skill in the art, and within the disclosure of Nakaoka (alternatively in view of “The Making, Shaping and Treating of Steel”), to store said aging sensitive steel at temperatures lower than room temperature in order to delay the aging response.

Concerning item b), it is known in the art of formable low carbon steel sheets to provide a coating (including enamel coatings) in order to improve corrosion resistance (ASM Handbook 10th Ed Vol 1, pp 212-215, 579-580, etc.) (“The Making, Shaping and Treating of Steel” p 1136, etc.) of low carbon steel sheets. Therefore, it would have been obvious to one of ordinary skill in the art to provide an enamel coating (i.e. a stove finish) to the ageing sensitive steel sheet processed by the temper rolling, ageing below room temperature, and cold forming process

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taught by Nakaoka, because the ASM Handbook or “The Making, Shaping and Treating of Steel” teaches that said coating improves corrosion resistance.

Concerning dependent claim 2, as stated above, Nakaoka teaches that natural aging of 2 months at room temperature (25°C) is approximately equivalent to aging 8 days at 38°C (column 3 lines 42-45). The relationship taught by Nakaoka (as well as “The Making, Shaping and Treating of Steel”, see above) between ageing temperature and time meets the instant equation.

Concerning dependent claim 5, Nakaoka does not mention the resulting bake hardening potential of said ageing sensitive steel after performing the above mentioned process steps. However, where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). “When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Because the prior art teaches substantially the same process steps performed on substantially the same alloy as presently claimed, then substantially the same properties, such as bake hardening potential, are expected to occur.

6. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakaoka et al (US 4,323,403) alone or in view of “ASM Handbook: Vol.1 Properties and Selection: Irons, Steels, and High-Performance Alloys” pp 141-146, 204-208, 212-215, 573-575, 578-580 or “The

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Making, Shaping and Treating of Steel” pp 410-413, 1118-1119, 1135-1138, 1283-1287, 1398-1404.

Nakaoka teaches a process for the production of steel sheets with good press formability (column 1 lines 15-19) comprising the steps of: a) providing an ageing sensitive steel (column 3 line 29) at room temperature (column 6 lines 33-34), b) subjecting said steel to temper rolling (column 5 lines 45-46) in order to achieve a yield point elongation=0 (column 5 line 49, column 6 lines 35-36), c) drawing such as press forming (column 1 lines 15, 35). The examiner points out that press forming qualifies as “cold working to give a structural component”, as presently claimed. Nakaoka does not mention the strip is “stove-finished” after step c).

However, it is known in the art of formable low carbon steel sheets to provide a coating (including enamel coatings) in order to improve corrosion resistance (ASM Handbook 10th Ed Vol 1, pp 212-215, 579-580, etc.) (“The Making, Shaping and Treating of Steel” p 1136, etc.) of low carbon steel sheets. Therefore, it would have been obvious to one of ordinary skill in the art to provide an enamel coating (i.e. a stove finish) to the ageing sensitive steel sheet processed by the temper rolling, ageing below room temperature, and cold forming process taught by Nakaoka, because the ASM Handbook or “The Making, Shaping and Treating of Steel” teaches that said coating improves corrosion resistance.

Concerning dependent claim 5, Nakaoka does not mention the resulting bake hardening potential of said ageing sensitive steel after performing the above mentioned process steps. However, where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d

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1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Because the prior art teaches substantially the same process steps performed on substantially the same alloy as presently claimed, then substantially the same properties, such as bake hardening potential, would occur.

Response to Arguments

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. A Supplemental Amendment after final Action under 37 C.F.R. 1.116(b) has not been received by the examiner (amending claims to overcome the 112 second paragraph rejections, referred to on page 3 of the Appeal Brief).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs- Morillo whose telephone number is (703) 308-4757. The examiner can normally be reached Monday through Friday from 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



GEORGE WYSZOMIERSKI
PRIMARY EXAMINER



jcm

August 26, 2002